

HAUSERMANN

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JAN 25 1982

APPLICATIONS BEING PREPARED

Philip Morris Incorporated  
Privileged and Confidential

21 January 1982

Code 1 - Offensive/Urgent  
Code 2 - Defensive/Urgent  
Code 3 - Offensive/Normal  
Code 4 - Defensive/Normal

689 CROSS-LINKED SMOKING MATERIAL

G. Keritsis  
Tobacco Materials/Burns/Gannon

Tobacco or non-tobacco materials are treated by spraying, dipping, coating, or homogenizing certain classes of compounds capable of reacting with a substrate or of forming water-insoluble films or coatings with a substrate. Filling capacity, structure stabilization, moisture insensitivity, strength (wet and dry), and processability are improved.

Related to 641; see also 653.

Inskeep/F&N

11-80	New data received.
12-80	Split out of 641--new data to WLKT for consideration.
5-18-81	Recommend sending to F&N ASAP.
9-18-81	Disclosure to F&N for application preparation.
1-82	Draft application expected soon.

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1003478955

854 TORUS INJECTION ZONE SEPARATOR

R. Thatcher, H. Odom, R. Edwards  
Engineering/Tew/Kay/Pasquine

A tobacco mixture containing lighter and heavier fractions is fed into one side of a housing while an airstream flow is introduced at the other side of the housing and in an upwardly directed flow course so as to cause it to entrain the lighter fraction of the mixture therein, with the heavier fraction falling to the bottom of the housing. A suction lift is maintained at the top of the housing to increase the velocity of the lighter fraction containing air flow outwardly from the housing. The lighter fraction containing air flow is then delivered to a tangential separator unit to recover the lighter fraction. The lighter fraction can, for example, be the laminae material from which cigarette tobacco filler is made.

FILED Sarofeen

3-78 Disclosure received (disclosure received in March but not logged in until October because it was misplaced by Mr. Sarofeen.  
11-3-78 Partial disclosure made to WLKT--still in development.  
5-15-79 Copy of disclosure sent to inventors for revision.  
8-9-79 Disclosure sent to WLKT for application preparation.  
9-24-79 PM 841 combined herewith.  
11-20-79 Final draft now in preparation.  
11-29-79 Working draft of combined 841/854 received.  
12-1-79 Draft sent to inventors for review.  
1-24-80 Brandt is revising draft per discussions.  
9-4-80 Redraft expected soon.  
1-15-81 Redraft expected soon.  
5-18-81 Recommend sending to F&N ASAP.  
6-30-81 Drawings ordered.  
8-21-81 Needs more input from inventors.  
9-10-81 Inventors comments on WLKT draft received.  
10-14-81 Executed and mailed to PTO.

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1003478956

857 LASER OPTICAL SYSTEM

E. Grollmund  
Engineering/Tew/Kay/Pasquine

A precision lens centering and focusing structure which comprises novel features for providing precise control and stability for a laser optical system.

Sarofeen/F&N  
CODE 2

11-27-78 Disclosure received.  
3-79 Search to be done when indicated.  
11-19-79 John Torrente is scheduled to complete the general laser search soon. This case may then be advanced for action once again.  
1-24-80 General laser search is complete. Case will now be evaluated for disposition.  
3-7-80 Disclosure sent to WLKT for application preparation.  
4-17-80 Torrente visit to advance this case.  
6-17-80 Discussed with Torrente.  
9-4-80 Final draft being prepared.  
1-15-81 Scheduled for reevaluation.  
5-18-81 To be discussed with F&N.

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879 PRODUCTION AND USE OF REACTION FLAVORS FROM YEAST HYDROLYSATE AND SUGARS

B. Semp, L. Wu, and J. Swain  
Flavor Development/Daylor/Meyer  
Biomaterials/Whidby/Farone/Lowitz

Reaction flavors for smoking products are disclosed. The flavors are prepared by reacting reducing sugars and selected hydrolysates of single-cell protein optionally in the presence of an aldehyde in an essentially solvent-free system. The thus prepared flavors may be incorporated into smoking compositions including tobacco, reconstituted tobacco, non-tobacco substitutes or mixtures thereof.

FILED Inskeep/D&O  
CODE 2

3-20-79 Disclosure received.  
4-80 Spoke with inventor Wu, and she will submit the necessary experimental data.  
5-8-80 Additional information and subjectives submitted and discussed with inventor Wu.  
9-22-81 To D&O for application preparation.  
10-26-81 Draft received—to inventors for review.  
12-23-81 Executed and mailed to D&O for filing.

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1003478957

**930 DIGITAL DRY WEIGHT COMPUTER AND SENSOR CALIBRATOR**

D. Phan, W. Sweeney, and J. Nghiem  
Engineering/Burnley/Kay/Pasquine

Determination of the moisture of a stream of tobacco is carried out with a microprocessor calibrator which receives the incoming sensor gauge signal and converts same to a calibrated or true moisture signal, the microprocessor including a memory for storing sets of calibration data corresponding to different tobacco mixtures and access means for conditioning the memory to make available the set of data of the particular tobacco mixture in the tobacco stream.

Blish

- 10-31-79 Disclosure received - inventors notified.
- 12-79 Assigned to Blish.
- 2-25-80 Inventors interviewed.
- 4-2-80 In-house prior art search completed—results sent to inventors.
- 4-3-80 Disclosure sent to WLKT for patentability evaluation and application preparation.
- 6-24-80 First draft completed, sent to inventors for review
- 6-27-80 Corrections for first draft to WLKT.
- 7-10-80 Redraft received—to inventors for review and more information.
- 11-19-80 Reminder sent to inventors concerning need for additional information.
- 3-17-81 Jim Kay requested to investigate status of application.
- 6-23-81 Inventors expect to have revised data with a month.
- 9-3-81 Memo to inventors reminding them of the need for additional information needed to complete application.

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1003478958

943 RAPID REORDERING WITH AN APRON DRYER

F. King, Jr. and P. Sherman  
Engineering/Burnley/Kay/Pasquine

A method and apparatus for drying tobacco and expeditiously reordering it to a desired moisture content immediately following the drying cycle. A shortened path tobacco dryer comprising a conveyor belt is made with a first stage heating section and a second stage cooling section. A third stage tobacco free fall area is provided where moisture is added on the fly after the tobacco is dropped from the belt at the end of the cooling section. The tobacco is made to fall in the form of a curtain of substantially single layered leaf or sheet through an aqueous mist where moisture is readily reabsorbed to reorder the tobacco.

Schardt

12-7-79 Disclosure received--inventors notified.

1-21-80 Assigned to Sarofeen.

2-80 PM data base search completed--results to inventors for review.

6-27-80 Disclosure sent to WLKT for preparation of application.

8-5-80 Disclosure and in-house search to WLKT.

9-4-80 Discussed with Brandt; meeting set for October.

10-22-80 Request from Brandt for more information--request forwarded to Kay and inventors.

12-8-80 Additional info to Brandt.

1-15-81 Draft expected soon.

5-18-81 Sarofeen to complete WLKT draft application.

7-10-81 Reassigned to JES.

8-81 Application redrafted, claims drafted; to be put in final form.

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1003478959

#### 944 PREPARATION OF MIXED MALONATE ESTERS

E. Southwick  
Chemical Research/Sanders/Osdene

The materials of this application are all designed to release carboxylic esters to mainstream smoke by means of a controlled thermal degradation of high-molecular weight precursors.

Inskeep/D&O

12-12-79 Disclosure received—inventor notified.  
1-21-80 Assigned to Inskeep.  
3-25-80 Experimental work needed.  
9-10-80 Polymer has been made, pyrolytic analysis in progress.  
1-15-81 Inventor still attempting to make satisfactory products.  
4-18-81 New information received.  
6-18-81 Disclosure to D&O for application preparation.  
7-30-81 Letter from D&O recommending search; 8-24 response.  
8-24-81 Comments, corrections to D&O; suggested search approved.  
Inventors getting further tests.  
10-13-81 Search results to inventor for review.  
12-17-81 Comments on search to D&O with instructions to proceed with application preparation.

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#### 954 CIGARETTE MAKER MOISTURE AND TEMPERATURE CONTROL

J. Remington

Object is to manipulate the dry bulb temperature and relative humidity of the air to obtain the desired moisture and temperature conditions of the tobacco in the maker.

Related to SN 111521.

Sarofeen

2-20-80 Disclosure received.  
2-21-80 Memo to Kay requesting supplemental disclosure information.  
2-27-80 Kay took back disclosure to add additional information.  
3-31-80 In-house search completed.  
4-11-80 Meeting with Engineering to discuss follow-up details.  
6-27-80 Disclosure sent to WLKT for patent application preparation.  
9-4-80 Draft in final states of preparation.  
1-15-81 Torrente expects to deliver application before 3-1-81.  
5-18-81 For discussion with F&N.  
6-24-81 This case as recently developed is of broader scope and importance and consequently the specification needs to be reworked. Memo sent to J. Kay regarding new data requirements.  
1-4-82 First draft completed and reviewed with D. Gillespie

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## 972 IMPROVEMENT OF LASER PERFORATOR

E. Cashwell  
Engineering/Kay/Pasquine

A single rotatable beam chopper-reflector disc is configured to separate a focused light beam into stirred sequence linear segments, then to reflect and re-direct the segments so as to utilize the total beam, or a real time scale for doing work such as perforating paper at spaced intervals positioned at discrete points selectively spaced to suit a particular intended purpose for the perforated paper such as for use as a cigarette wrapper.

Related to 974 and 984.

Sarofeen/F&N

7-7-80 Disclosure received—inventor notified.  
9-4-80 Inventor is adding to the disclosure.  
9-20-80 Received additional information needed to prepare application.  
1-15-81 974 and 998 combined herewith; work on first draft begun.  
1-21-81 Disclosure to WLKT for application preparation.  
3-23-81 WLKT instructed not to do any further work on this case.  
5-18-81 Recommend sending to F&N ASAP.  
8-21-81 984 to be combined herewith.  
9-9-81 Disclosure to F&N for application preparation.

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## 977 RL BLENDING

J. Osmalov and F. Sherwood  
Tobacco Services/Osmalov/Gannon

Sheet product of a reconstituted tobacco process is cut and shredded apart from other intended components of a cigarette filler, and is then blended with the shredded strip, expanded tobacco, and the like in shredded form which has already been dried to making moisture.

Inskeep

7-21-80 Disclosure received—assigned to Inskeep.  
11-10-80 Work in progress.  
2-17-81 Some results; more coming but not right away.  
4-9-81 Process looking good; proceed.  
5-18-81 To be discussed with F&N.  
8-27-81 In-house search completed.  
9-1-81 First draft to inventors for review.

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1003478961



#### 984 METHOD FOR SUBDIVIDING A BEAM

P. Martin and E. Stultz  
Physical Research/Kassman/Farone/Lowitz  
Engineering/Kay/Pasquine

A means of subdividing a laser beam with no loss of power. The multiple beams simultaneously perforate the paper so that the perforations do not vary in relative position as the paper oscillates in position.

Sarofeen/F&N/Diana

CODE 2

8-25-80 Disclosure received—inventors notified  
3-23-81 WLKT instructed not to do any further work on this case.  
5-18-81 To be combined with 972 and sent to F&N.  
9-9-81 Disclosure to F&N for application preparation.

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#### 986 POWER METER

E. Stultz, M. Barnette, W. Smick  
Engineering/Cashwell/Pasquine/Kay

Object: Power will be maintained at a given level without variation concerns due to line voltage changes, gas flow changes, and/or any fluctuations in other laser parameters including environmental conditions. Description: Use of a Power Meter output from an end mirror type to feed an electronic signal to increase or decrease laser power to a present level and thereby maintain and control laser output power. With this device a detector of holes in a web of laser perforated paper can be used to accurately control the quality and/or pressure drop of holes laser perforated into the web of paper by feeding back this signal to control the stabilized laser power.

Sarofeen/F&N/Diana

9-9-80 Disclosure received—inventors notified.  
1-21-81 Disclosure to WLKT for application preparation.  
3-23-81 WLKT instructed not to do any further work on this case.  
5-18-81 Recommend sending to F&N ASAP.  
9-9-81 Disclosure to F&N for application preparation.  
11-3-81 Additional disclosure materials to F&N.

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1003478962



## **988** OPTICAL POROSITY SYSTEM

N. Nunnally and E. Grollmund  
Engineering Services/Mutter/Gannon

Dual channels of collimated light are beamed through web perforations. Photo diodes are exposed to the transmitted light and provide a quality photo current proportional to a value of total porosity.

INACTIVE Schardt  
9-16-80 Disclosure received--inventor notified.  
11-17-80 Compared with 929 by Blish.  
1-21-81 Disclosure to WLKT for application preparation.  
3-23-81 WLKT instructed not to do any further work on this case.  
5-18-81 For discussion with F&N.  
8-21-81 Reassigned to Schardt; meeting with inventor Nunnally, SAH, GMJS, an NAB.  
9-14-81 Additional info received from inventor; application being prepared.  
12-2-81 Inactivated--close prior art.

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## **990** NON-COMBUSTIBLE CARBON FILTER

N. Rainer and C. McClung  
Tobacco Materials/Burns/Gannon

This invention consists of a filter made from crimped paper which is pyrolyzed by passing through a heated die. This filter removes total particulate matter more efficiently than cellulose acetate filters and does not affect the gas phase as do activated charcoal filters.

Related to 955.

Blish/F&N/Shaw  
9-16-80 Disclosure received--inventors notified.  
10-30-80 Further information received.  
1-26-81 First draft completed.  
3-2-81 In-house search completed.  
3-25-81 Pilot plant in 2 months to manufacture full size rod.  
3-26-81 Reassigned to Inskeep for possible combining with PM 955.  
5-4-81 Reassigned to Blish.  
6-9-81 Disclosure to F&N for application preparation.  
9-2-81 Background art to F&N.  
10-6-81 Shaw indicated he is waiting for more info from Rainer.  
10-21-81 Draft to Adkins.  
10-16-81 Draft to inventors for review.  
11-9-81 Draft returned to F&N for final form indicating hold until Adkins and Holtzman review.  
12-2-81 F&N redraft reviewed with inventors.  
12-22-81 Draft and comments returned to F&N.

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1003478963

## 991 METHOD OF TREATING A MASS OF TOBACCO

J. Davis, Jr. and H. Wilkerson  
Engineering/Pasquine/Kay

A method of treating a mass of tobacco to condition it prior to processing. The tobacco mass is housed in a hermetically sealable chamber and a perforated probe is inserted into the center of the mass. A heat sensor is positioned adjacent the probe. Non-condensibles are evacuated from the mass and steam entered. Care is taken to expose the mass long enough to steaming until tobacco beetle killing temperature has been reached in the vicinity of the heat sensor and held for a period of time needed to kill the beetles.

Sarofeen

9-18-80 Disclosure received—inventors notified.  
9-24-80 Assigned to Sarofeen.  
1-21-81 Disclosure to WLKT for application preparation.  
2-17-81 Search results to WLKT.  
3-23-81 WLKT instructed not to do any further work on this case.  
5-18-81 Sarofeen reviewing.  
6-24-81 Question whether Steinbrecher is prior art?  
9-20-81 Should be checked against PM 829 for inventorship determination. To be discussed with J. Kay.  
11-6-81 Original file lost—new file reconstructed.  
11-18-81 Draft application to Wilkerson for review.  
1-4-82 Inventorship pending--similar to Steinbrecher.

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## 992 AUTOMATED DE-CHOKER DEVICE

J. Gregory III  
Engineering/Pasquine/Kay

Tobacco traveling upward in a chimney is decelerated prior to striking a suction belt in order to prevent breakage by diverting part of the air flow through a screen. Periodic chokes in the screen are cleared by mechanically rotating the dechoker device 90° counter-clockwise so that the air flow which is normally diverted through the dechoker device flows through the screen in the opposite direction, clearing the screen of tobacco.

Blish

9-18-80 Disclosure received—inventor notified.  
9-24-80 Assigned to Blish.  
6-18-81 Prior art search completed.  
9-29-81 Search reviewed and discussed with inventor.  
12-16-81 Draft application to inventor for review.

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1003478964

## 999 VARIABLE DILUTION FILTER

J. Adams  
Engineering/Tew/Hayward/Kay/Pasquine

Object of the invention: to have the customer be able to control the proportions of the constituents received through the filter.

FILED Blish  
10-28-80 Disclosure received—inventor notified.  
12-9-80 In-house search completed.  
6-29-81 Results of prior art search evaluated and sent to inventor for review.  
7-7-81 Prior art reviewed with inventor.  
8-1-81 Drawings ordered.  
8-19-81 Draft application to inventor/management for review.  
9-23-81 Executed and mailed to PTO.

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## 1001 FILTER PLUG IMPRESSER

J. Wheless  
Engineering/Tew/Pasquine/Kay

A system of filter plug transport drums carrying peripherally spaced ceramic inserts having headed wires arranged longitudinally for heat impressing grooves into filter plug surfaces. An advantage is gained in that drums of large diameter on several drums of small diameter arranged in series provide a preselected time dwell interval which allows sufficient time for exposing each plug to hot wires long enough to make a proper impression in high production put-through.

Related to 1007; see also 1033, 1034, 1035 (FTR).

FILED Sarofeen/F&N—Diana  
11-13-80 Disclosure received—inventor notified.  
1-21-81 Disclosure to WLKT for application preparation.  
2-23-81 WLKT instructed not to do any further work on this case.  
5-18-81 For discussion with F&N re Barclay situation.  
6-24-81 Needs to be coordinated with other Barclay-type cases.  
8-5-81 Memo from J. Kay saying fluted-filter production will start the week of August 24.  
8-13-81 Memo from AIP to GMJS: have F&N get started on this right away. To file in UK only, initially.  
8-21-81 Draft prepared by F&N and sent to Reddie & Grose for filing in UK.  
9-10-81 To be filed in U.S. first, final draft being prepared.  
9-28-81 Executed and mailed to PTO.  
10-5-81 Search requested from K&S.  
1-82 CIP application filed.

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1003478965

## **1007** MANUFACTURE OF FLUTED PLUGS

A. Gillespie, K. Stover, and W. Sanderson  
Engineering/Tew/Kay/Pasquine

The invention is the addition of a system of rollers to a filter making machine to deform an otherwise round plug into a desired shape.

Related to 1001; see also 1033, 1034, 1035 (FTR).

Sarofeen

- 12-10-80 Disclosure received—inventors notified.
- 1-21-81 Disclosure to WLKT for application preparation.
- 3-23-91 WLKT instructed not to do any further work on this case.
- 5-18-81 For discussion with F&N re Barclay situation.
- 6-24-81 Needs to be coordinated with other Barclay-type cases.
- 8-21-81 To proceed in view of decision to file PM 1001 in U.S.
- 1-5-82 Recommend sending to F&N for application preparation.

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## **1008** CIGARETTE DETECTION AND REJECTION DEVICE

R. Ripley and R. Knight  
Engineering/Tew/Hayward/Kay/Pasquine

A cigarette testing device detects improperly filled or missing cigarettes in groups of cigarettes in a cigarette packing machine. Tappets are repositioned against the ends of cigarettes and the position of the tappets is determined by optical sensors. Defective cigarettes are removed from the group by nozzles. One to one correspondence between cigarettes, tappets, sensors, and nozzle ejectors allows single defective cigarettes to be rejected without rejecting the entire group of cigarettes.

Blish

- 12-18-80 Disclosure received—inventors notified.
- 3-4-81 Inventors interviewed; in-house search requested.
- 4-29-81 Search results to inventor for review.
- 8-5-81 First draft completed—to inventors for review.
- 8-19-81 Inventors comments on draft received; draft to management for review.
- 12-16-81 Memo to Kay requesting return of draft.

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1003478966

**1012** DENITRATION OF TOBACCO EXTRACT LIQUOR OR SOLID TOBACCO MATERIAL

B. Semp and D. Teng  
Biomaterials/Whidby/Farone/Lowitz

A process for denitration of either tobacco extract liquor or solid tobacco materials has been developed which removes nitrate using bacteria which are naturally present on tobacco. The specific bacteria desired are selected from the total mixture of those present by heating the substrate to 55°C and allowing the desired strains to first grow and then denitrify, the high temperature suppressing undesirable micro-organisms. An increase in pH of the substrate to around 7 is desirable and can be facilitated if desired. The movement of the substrate is controlled to minimize unwanted side reactions.

Related to PM 1045, 1047, 1053

COMBINED Inskeep/F&N—Haley  
CODE 2

1-26-81 Disclosure received—inventors notified.  
4-13-81 Inventor Semp has indicated that experimental data generated at Park 500 is now available—preparation of the application may now proceed.  
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6-29-81 Experimental work in progress at Lancaster leaf.  
9-10-81 Copy of disclosure to Haley by SAH.  
10-12-81 Combined with PM 1045.

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**1018** A MECHANICAL TOBACCO PROCESSOR

I. Uydess  
Biomaterials/Whidby/Farone/Lowitz

A mechanized tobacco processor for the preconditioning, infiltration, heating and/or "expansion" of tobacco under constant temperature, RH, etc. within a closed circular "tower" similar in configuration to a "cyclotron."

Inskeep/F&N/Shaw  
CODE 1

2-19-81 Disclosure received—inventor notified.  
2-25-81 Disclosure to WLKT for application preparation.  
5-18-81 Recommend sending to F&N ASAP.  
9-11-81 Inventor leaving company; he discussed with F&N. They will proceed to prepare application.  
1-82 F&N attorney needs to consult with engineers here.

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1003478967

**1025** APPARATUS FOR EXTRACTING LIQUID-SOLUBLE CONSTITUENTS  
FROM CUT-SMALL PLANT MATERIAL

FTR

The invention relates to an apparatus for extracting liquid-soluble constituents from cut-small plant or vegetable material, particularly tobacco by washing out.

FILED Blish  
12-19-80 Disclosure received.  
3-5-81 Assigned to Hutcheson.  
8-1-81 Assigned to Blish  
9-2-81 Patentability evaluation complete; additional information requested from FTR.  
9-7-81 FTR to file via EPO/PCT in Switzerland, Netherlands, Belgium, UK, France, and Italy using German priority.  
11-13-81 Draft completed.  
12-1-81 Info requested from FTR to complete application; 12-14 info received.  
1-4-82 Application to FTR for executed.  
1-18-82 Mailed to PTO.

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**1026** PROCESS FOR THE PREPARATION OF TOBACCO AND TOBACCO  
PREPARED BY THIS PROCESS

H. Gaisch, Ghiste, D. Schulthess  
FTR

The invention relates to a process for the preparation of tobacco into which initially insoluble protein components and protein subunits are decomposed into soluble protein fragments by enzymatic treatment and then the soluble components are dissolved in water and the solution obtained is separated from the treated tobacco and tobacco prepared by this process.

FILED Inskeep/F&N—Haley  
2-3-81 Disclosure received.  
3-5-81 Assigned to Hutcheson  
6-27-81 Recommend sending translation to F&N for assessment.  
8-13-81 Disclosure to Haley for consideration of additional filings.  
12-11-81 Draft reviewed by Teng.  
12-17-81 Executed in Switzerland by inventors.  
1-5-82 Mailed to PTO.

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1003478968

### 1030 ACETYL-PYRAZINE FLAVORANTS

D. Williams, Y. Houminer, and R. Southwick  
Chemical Research/Sanders/Osdene

This invention relates to a novel process for preparing heretofore unknown ketones having desirable odor and flavor properties.

#### FILED Inskeep/D&O

3-13-81 Disclosure received—inventors notified.  
3-27-81 Disclosure typed and sent to inventors and manager for review.  
4-9-81 Corrections made and disclosure and search results sent to Depaoli for application preparation.  
6-9-81 Additional information to Depaoli.  
6-18-81 Application is being prepared based on pyrazine synthesis only; CIP possible at later date.  
7-24-81 Draft received; 7-29 to inventors for review.  
8-6-81 Commentary received from D&O.  
8-26-81 Corrected draft returned to D&O.  
9-10-81 Revised draft received.  
9-28-81 Executed and mailed to PTO.

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### 1033 ROD-LIKE SMOKING ARTICLE WITH SECONDARY AIR CHANNELS AND APPARATUS FOR PRODUCING SUCH AN ARTICLE

#### FTR

The invention relates to a rod-like, smoking article with a rod-like mouthpiece core at the mouth end of a tobacco rod, the entire periphery of said mouthpiece core being enveloped by an adhered wrapping paper which is suitable for contact with the lips and which overlappingly follows a covering paper surrounding the tobacco rod and with secondary air channels covered by the wrapping paper on the periphery of the mouthpiece core and an apparatus for producing such an article.

Gregory

4-8-81 Disclosure received.  
5-18-81 For discussion with F&N.  
6-24-81 Needs to be coordinated with other Barclay-type cases.  
9-7-81 FTR to file via EPO/PCT in Switzerland, France, Netherlands, UK, Belgium, Sweden, and Finland using German priority.  
9-16-81 Disclosure to Bailey by AIP for considering proposed foreign filing.  
12-30-81 Formal drawings ordered; FTR telexed for inventor data; application being prepared.  
1-82 Draft completed.

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1003478969



**1034** APPARATUS FOR STAMPING OPEN CHANNELS IN THE PERIPHERY  
OF FILTER PORTIONS

**FTR**

The invention relates to an apparatus for impressing or stamping open channels into the periphery of rod-like, peripherally thermally deformable filter portions of smokers' requisites transported in troughs arranged coaxially to the rotation axis and equidistantly on the periphery of a trough conveyor driven in rotary manner and stamped with heated stamping dies. Such filter portions can be produced by extruding in the form of a strand and subsequently dividing into portions.

Gregory

4-8-81 Disclosure received.

5-18-81 For discussion with F&N.

6-24-81 Needs to be coordinated with other Barclay-type cases.

9-7-81 FTR to file via EPO/PCT in Switzerland, France, Netherlands, UK, Belgium, Sweden, and Finland using German priority.

9-16-81 Disclosure to Bailey by AIP for considering proposed foreign filing.

12-30-81 Formal drawings ordered; FTR telexed for inventor data; application being prepared.

1-82 Draft completed.

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1003478970

**1035 ROD-LIKE SMOKING ARTICLES WITH A FILTER ROD AT THE MOUTH END AND APPARATUS FOR PRODUCING SUCH AN ARTICLE**

**FTR**

The invention relates to a rod-like, smoking article with a filter rod at the mouth end of a tobacco rod, said filter rod having over its entire periphery a wrapping paper suitable for contact with the lips, which is overlappingly connected to a wrapper surrounding the tobacco rod and has on its periphery secondary air channels covered by the wrapping paper and an apparatus for producing such an article.

**Gregory**

4-8-81 Disclosure received.  
5-18-81 For discussion with F&N.  
6-24-81 Needs to be coordinated with other Barclay-type cases.  
9-7-81 FTR to file via EPO/PCT in Switzerland, France, Netherlands, UK, Belgium, Sweden, and Finland using German priority.  
9-16-81 Disclosure to Bailey by AIP for considering proposed foreign filing.  
12-30-81 Formal drawings ordered; FTR telexed for inventor data; application being prepared.  
1-82 Draft completed.

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1003478971

**1038** EXPANSION OF TOBACCO UTILIZING TREATMENT WITH WATER OR STEAM

G. Keritsis and H. Sun  
Tobacco Materials/Burns/Gannon

A process is disclosed for increasing the cylinder volume of unimpregnated tobacco lamina filler by introducing the filler into contact with a gaseous medium, at elevated temperature and at atmospheric pressure, at a rate which is effective to provide a substantially uniform and substantially constant rate of heat transfer from the gaseous medium to the filler and for a total contact time with the gaseous medium which is sufficient to expand the filler. The filler has an OV value, immediately before treatment, within the range of from about 5 to 20% and the gaseous medium comprises at least about 65% steam and is at a temperature of at least about 450°F.

Related to 653

Inskeep/F&N/Shaw

4-28-81 Disclosure received--inventor notified.  
6-24-81 Draft application to inventors.  
7-7-81 Comments from Keritsis  
10-7-81 Disclosure to F&N for application preparation.  
11-20-81 Further info received.  
1-6-82 New info handed to Shaw.

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**1039** CONSTANT MOISTURE HEAT TREATMENT

J. Banyasz, C. Lilly, P. Martin, H. Merritt, C. Owens

Physical Research/Kassman/Farone/Lowitz

Inskeep/F&N/Shaw

CODE 2

4-28-81 Disclosure received--inventor notified.  
6-10-81 R. Shaw of F&N here to interview inventors--he will prepare application.  
6-30-81 Background information on pending US expansion cases to F&N.  
10-7-81 Shaw to proceed with application preparation.  
10-22-81 Shaw interview with Banyasz; need notebook pages.  
11-25-81 Notebook pages to Shaw.  
12-17-81 PM report 81-262 to Shaw.

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1003478972

**1040** THE USE OF SUGARS AND CONTROLLED MOISTURE PROFILES IN  
THE HEAT TREATMENT OF TOBACCO

J. Banyasz, C. Lilly, P. Martin, B. Semp, H. Merritt, C. Owens

Physical Research/Kassman/Farone/Lowitz

Inskeep/F&N/Shaw

CODE I

4-28-81 Disclosure received—inventor notified.

6-10-81 R. Shaw of F&N here to interview inventors—he will prepare application.

6-30-81 Background information on pending US expansion cases to F&N.

10-7-81 Shaw to proceed with application preparation.

10-22-81 Shaw interview with Banyasz; need notebook pages.

11-25-81 Notebook pages to Shaw.

12-11-81 PM report 81-262 to F&N.

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**1042** SELF-CLEANING POROSITY MONITOR GAGING HEAD

E. Grollmund

Engineering/Pasquine/Kay

Sarofeen/F&N/Diana

4-29-81 Disclosure received—inventor notified.

9-9-81 Disclosure to F&N for application preparation.

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**1045** AUTOGENOUS FERMENTATION—PARK 500

B. Semp

Biomaterials/Whidby/Farone/Lowitz

This disclosure related to denitrification of tobacco extracts using naturally occurring thermophilic organisms discovered in feeder tanks at Park 500.

**FILED** Inskeep/F&N—Haley

CODE I

5-13-81 Disclosure received—inventor notified.

5-27-81 Inventor met with Haley of F&N—additional data requested from inventor. F&N will prepare application.

6-19-81 Additional background information to F&N.

9-10-81 Haley discussed with inventors and managers. Redraft due by 9-21.

PM 1012, 1047, and 1053 combined herewith.

9-29-81 Executed and mailed to PTO.

\* \* \* \* \*

1003478973

**1047** PROCESS FOR DENITRIFICATION OF TOBACCO EXTRACTS AND MICROORGANISMS USED THEREIN

V. Malik

Biomaterials/Whidby/Farone/Lowitz

This disclosure relates to improvements and more recent work related to denitrification of tobacco extracts using purified cultures of thermophilis isolated at Park 500. Characterization of microorganisms may result in additional coverage.

Related to 1012, 1045, 1053

COMBINED

Inskeep/F&N—Haley

CODE 1

5-27-81 Inventor met with Haley of F&N—additional data requested from inventor. F&N will prepare application.  
6-19-81 Additional background information to F&N.  
8-10-81 Copy of Malik's memo to J. Whidby of 7-28 to Haley.  
10-12-81 Combined with PM 1045.

\* \* \* \* \*

**1048** A PROCESS FOR THE EXPANSION OF BRIGHT FILLER

E. Moaz

Biomaterials/Whidby/Farone/Lowitz

Related to 1038-1040.

A process for the expansion of bright filler with ammonium carbamate and with no puffing agent before and after cylinder treatment.

Inskeep/F&N/Shaw

CODE 1

6-15-81 Disclosure received—inventor notified.  
6-17-81 Disclosure to F&N for evaluation with respect to 1038-1040.  
10-7-81 F&N instructed to prepare application.  
10-22-81 Shaw interview with inventor  
11-5-81 Additional disclosure materials to F&N.

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1003478974

**1053** METHOD FOR DENITRIFICATION OF TOBACCO EXTRACTS

H. Bravo  
Biomaterials/Whidby/Farone/Lowitz

Tobacco extracts are denitrified by naturally occurring thermophilic organisms in continuous and/or fed-batch mode.

Related to 1012, 1045, 1047

COMBINED Inskeep/F&N—Haley  
CODE I

5-27-81 Inventor met with Haley of F&N; disclosure and  
experimental data requested.  
6-29-81 Disclosure received—inventor notified.  
10-12-81 Combined with PM 1045.

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**1083** SMOKING ARTICLE - MARK II

H. Lanzillotti and J. Hearn  
Process Development/Gannon

Palmer/F&N/Shaw

8-14-81 Disclosure received—inventors notified.  
10-6-81 Shaw indicated he is waiting for more info from inventor.  
11-12-81 Phone conference between Shaw and Hearn to discuss  
approaches and experiments.

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**1090** ARTICLE DETECTOR SYSTEM

J. Gray and C. Goodwin  
Engineering/Hayward/Kay/Pasquine

A presence detector employing reflected, focused infrared light to monitor the presence of articles passing thereby.

FILED Schardt

12-22-81 Disclosure received.  
12-30-81 Application executed and mailed to Betty Byrd for filing.

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1003478975